



**WATERREUSE<sup>®</sup>**  
**2024 SYMPOSIUM**

MARCH 11-14, 2024 | HILTON DENVER CITY CENTER



**REMOVING BARRIERS,  
ELEVATING OPPORTUNITIES**

IN COLLABORATION WITH THE WATER RESEARCH FOUNDATION

# WELCOME TO THE 2024 WATEREUSE SYMPOSIUM

## WELCOME TO DENVER!

The WaterReuse Association and The Water Research Foundation are proud to present the 2024 WaterReuse Symposium: *Removing Barriers, Elevating Opportunities*.

The 39th Annual WaterReuse Symposium is a celebration of a unique moment for water reuse. New funding, new collaborations, and new regulatory frameworks are elevating opportunities for reuse projects nationwide. As a community of water reuse practitioners and passionate advocates, we have reached this summit together. Together we can remove barriers and empower safer, more resilient, and more sustainable communities and businesses with water reuse.

This year, we're gathering in Colorado: the first state to adopt comprehensive direct potable reuse regulations. As we remove long-standing barriers, we are boldly advancing new opportunities. We also celebrate new direct potable reuse regulations recently adopted in California, and robust work on advancing regulations in Arizona, Florida, Texas, and beyond.

Our keynote speaker and native Coloradan Pete McBride will open the Symposium with an intimate portrait of the Colorado River. McBride's photography and reflections illuminate the critical need for water recycling to protect our precious watersheds and ensure resilient, locally controlled water resources for our environment and communities.

Our plenary panels on *Restoring Our Natural Resources through Reuse and Water Recycling in the Colorado River Basin* will continue the themes introduced by the keynote,

featuring the perspectives of leading water sector voices. The Annual Awards Luncheon on Tuesday is an opportunity to celebrate the projects and people that are demonstrating exemplary leadership in advancing water recycling. We also invite you to join us on Wednesday and Thursday for a *Global Dialogue on Water Reuse*, presented in partnership with the International Desalination and Reuse Association with support from Veolia. This year's Symposium features more than a dozen presentations of research projects funded by The Water Research Foundation and includes a research planning workshop on the first afternoon of the event. Finally, don't miss the inaugural *Water Reuse Technology Showcase* on Thursday, presented in partnership with the National Alliance for Water Innovation.

We invite you to visit lower level 1 (Independence and Gold Coin) to view outstanding poster presentations on a wide breadth of water reuse topics. During networking breaks, various poster presenters will be available to discuss their work. Learn more in the program schedule on pages 10-30. Please take the opportunity to network with and learn from our exhibitors in the foyer and then unwind with your colleagues during a reception at the Denver Museum of Nature and Science on Wednesday evening.

We hope you find great value in our robust program of workshops, concurrent technical sessions, and plenary discussions that range from applied research that is helping to remove barriers to leading-edge policies and practices that are elevating opportunities. Thank you for attending this year's Symposium and remember to mark your calendars for March 2025 in Tampa, Florida!



**PATRICIA L. SINICROPI**  
Executive Director  
WaterReuse Association



**PETER GREVATT**  
Chief Executive Officer  
The Water Research  
Foundation

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## STAY CONNECTED

### SYMPOSIUM WI-FI

Stay connected at the WateReuse Symposium with Wi-Fi throughout the meeting space, thanks to our generous sponsor Sundt Construction.



**Network: symposiumwifi**

**Password: sponsorsundt**



**SUNDT**

### SOCIAL MEDIA

Follow WateReuse on social media, and share your Symposium content:

**#WateReuse24**



WateReuse Association



WateReuse Association



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# REGISTRATION & EXHIBITION

## REGISTRATION

If you registered in advance for the Symposium, pick up your badge at the registration desk located on the Lobby Level next to hotel check-in. If you need other assistance and information, please visit the Symposium info desk on Lower Level 2.

### REGISTRATION DESK HOURS

Monday, March 11 | 11:00 am – 6:00 pm  
Tuesday, March 12 | 7:00 am – 5:00 pm  
Wednesday, March 13 | 7:00 am – 5:00 pm

## EXHIBITION | COLORADO FOYER

### EXHIBITION HOURS

Monday, March 11 | 5:00 pm – 6:30 pm  
Tuesday, March 12 | 10:30 am – 3:30 pm  
Wednesday, March 13 | 10:30 am – 3:30 pm

**VISIT OUR EXHIBITORS,  
REPRESENTING THE FULL RANGE  
OF WATER REUSE RESEARCH,  
SCIENCE, & SERVICES.**

- AMERICAN WATER CHEMICALS
- AMERICAN WATER WORKS ASSOCIATION
- CAROLLO
- CDM SMITH
- DN TANKS
- FEDCO
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- ORTHOS LIQUID SYSTEMS, INC
- PARSONS
- PUREFLOW FILTRATION & OZONE DIVISIONS
- TORAY MEMBRANE USA, INC.
- TROJAN TECHNOLOGIES
- VEOLIA
- THE WATER RESEARCH FOUNDATION
- WIGEN WATER TECHNOLOGIES
- XYLEM

# SCHEDULE INFORMATION

## HEADSHOT STUDIO | SILVERTON, LOWER LEVEL 1

Refresh your profile and resume with a headshot taken by a professional photographer!

**Tuesday, March 12: 10:30 am – 12:00 pm | 3:00 pm – 4:30 pm**

**Wednesday, March 13: 10:30 am – 12:00 pm | 3:00 pm – 4:30 pm**

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## SPEAKER READY ROOM | MATCHLESS, LOWER LEVEL 1

**Monday, March 11 | 12:30 pm – 4:30 pm**

**Tuesday, March 12 | 7:00 am – 1:00 pm**

**Wednesday, March 13 | 7:00 am – 1:00 pm**

## FACILITY TOURS

If you are signed up for one of the Symposium off-site tours, please meet inside at the hotel lobby entrance 15 minutes prior to the listed departure time.

**Monday, March 11 | 1:00 pm – 5:00 pm**

Experiments in Water: CSU Spur's Hydro Building, Denver Water, and PureWater Colorado Mobile DPR Facility

**Tuesday, March 12 | 11:00 am – 3:00 pm**

Experiments in Water: CSU Spur's Hydro Building, Denver Water, and PureWater Colorado Mobile DPR Facility

**Wednesday, March 13 | 8:00 am – 12:00 pm**

Closing the Loop: Aurora Water's Binney Treatment Plant

**Wednesday, March 13 | 2:00 pm – 5:00 pm**

Reuse for the Future: Castle Rock Water's Plum Creek Water Purification Facility

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## GLOBAL DIALOGUE ON WATER REUSE

Join the WaterReuse Association and the International Desalination and Reuse Association (IDRA) for a conversation on the drivers, challenges, and opportunities for accelerating the adoption of water reuse around the world.

Wednesday, March 13 | 2:00 pm - 3:00 pm: International Expert Panel

Wednesday, March 13 | 3:30 pm - 5:00 pm: Roundtable Discussion

Thursday, March 14 | 9:00 am - 10:15 am: Plenary: International Collaboration – A Path Forward

### GLOBAL DIALOGUE ON WATER REUSE AT THE IDRA 2024 WORLD CONGRESS

The Global Dialogue on Water Reuse continues in December 2024 at the IDRA 2024 World Congress in Abu Dhabi, capturing additional perspectives for inclusion in a final white paper.



WATERREUSE



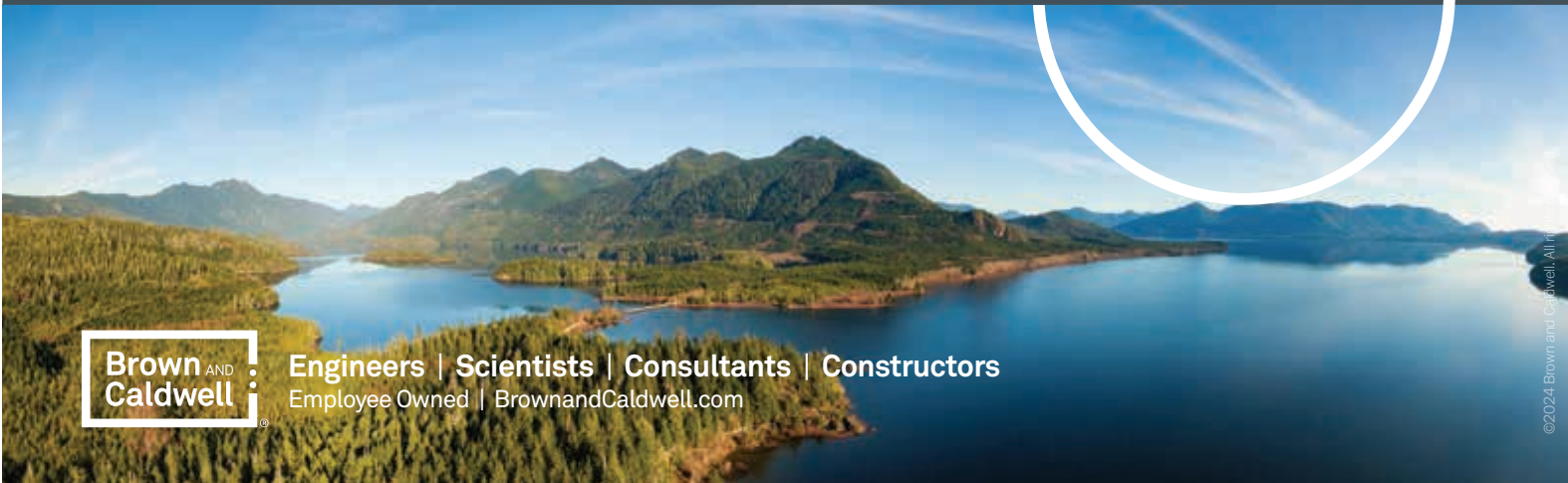
VEOLIA



WRAP

# Thinking of water in new ways

Creating sustainable water supplies for the future requires reimagining the water cycle



Engineers | Scientists | Consultants | Constructors  
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# Diversified portfolio

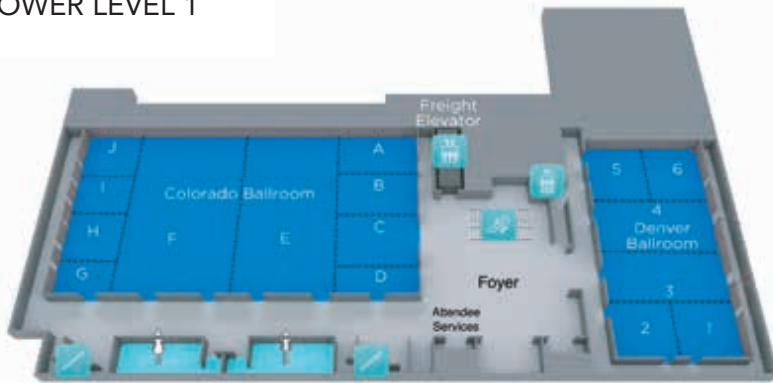
With increasing pressure on water security, the need for diversified water sources has never been greater. Water reuse is integral to a resilient water management portfolio.

As the world's trusted infrastructure consulting firm, we understand both the urgency of accelerating water reuse implementation, and our responsibility to respond in an impactful and enduring way.

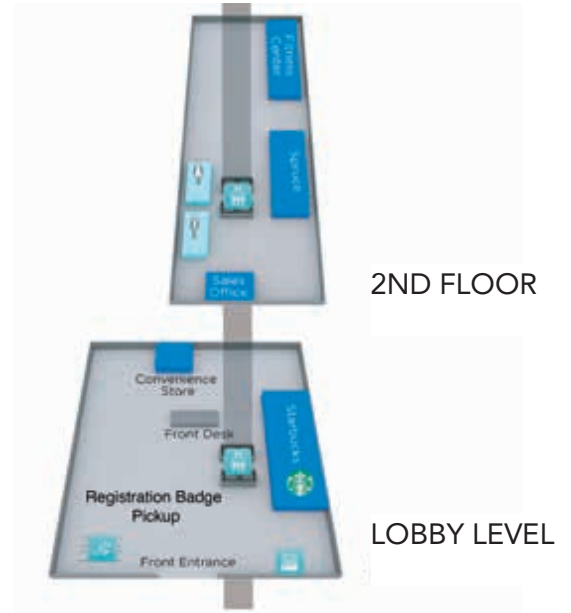
# HILTON DENVER CITY CENTER



LOWER LEVEL 1



LOWER LEVEL 2



2ND FLOOR

LOBBY LEVEL

## JOIN THE WATEREUSE COMMUNITY

The WaterReuse Association is the nation's only trade association solely dedicated to advancing laws, policy, funding, and public acceptance of recycled water. Our membership includes utilities that recycle water, businesses that support the development of recycled water projects, and customers that use recycled water for operations.

### WHY JOIN?

- Impact national and state policymaking
- Engage with your peers
- Connect everyone in your organization with one membership
- Access education and professional development
- Build your network and expand your business



Learn more and join: [www.watereuse.org/join](http://www.watereuse.org/join)



# RESOURCES TO SUPPORT YOUR EXPERIENCE

## PROFESSIONAL DEVELOPMENT

The 2024 WaterReuse Symposium is pleased to offer Professional Development Hours (PDHs) for all states. It is the attendee's responsibility to follow up with state accreditation agencies to see whether you qualify.

### **How Do I Earn Educational Credits at the Symposium?**

The 2024 Annual WaterReuse Symposium PDH Request form is available at the information desk on Lower Level 2. Please complete and email the form to [Symposium@Waterreuse.org](mailto:Symposium@Waterreuse.org) or return it back to the information desk before the end of the Symposium. The final deadline to email the form to receive your PDH Certificate is Friday, June 21, 2024.

### **When Will I Receive Credits for the Symposium?**

Certificates will be emailed to participants within 4 weeks after receipt. It is the attendee's responsibility to submit the certificates to state accreditation agencies to request credit.

### **General Information**

Terminology and education credit requirements and restrictions vary widely. All participants are responsible for checking with their license/certification authority to ensure that the WaterReuse technical sessions meet specific requirements.

## POWERPOINT PRESENTATIONS

A link will be emailed to all Symposium attendees after the conference for access to the PowerPoint presentations.

# Recover. Revitalize. Reuse.

We believe access to clean water is a basic human right. We are working hard to ensure that our communities have more resilient water supply today and in the future. We are committed to helping our clients on their journey of water resource recovery and reuse, and environmental stewardship.

[bv.com/water](https://bv.com/water)



# SYMPOSIUM SCHEDULE



## MORE INFO

For full session descriptions and the latest changes, visit our online program at the QR code or [watereuse.org/schedule](http://watereuse.org/schedule).

SCAN HERE



Session aligns with National Water Reuse Action Plan (WRAP) efforts.



Session aligns with The Water Research Foundation (WRF) efforts.

## MONDAY, MARCH 11

**8:00 am - 4:00 pm** **STATE WATER REUSE REGULATOR SUMMIT (INVITATION ONLY)**  
 State regulatory agencies from across the U.S. convene at the WaterReuse Symposium to discuss and share information and experiences on programs and approaches for the management of water reuse applications. Organized in partnership with the Association of Clean Water Administrators (ACWA), Association of State Drinking Water Administrators (ASDWA), and the U.S. Environmental Protection Agency.

**1:00 pm - 5:00 pm** **TOUR: EXPERIMENTS IN WATER (CSU, DENVER WATER, MOBILE DPR)**

**WATER REUSE IN COLORADO**  
 DENVER 5-6  
 Moderator:  
 Susheera Pochiraju,  
 Hazen and Sawyer

**1:30 pm - 2:00 pm**  
**100 Years & Not Yet Retired: Colorado Springs Non-Potable Reuse**  
 Laurie Sullivan,  
 Brown & Caldwell;  
 Renn Hankawa,  
 Colorado Springs Utilities

**WORKSHOP**  
**COMMUNICATION INTENSIVE**  
 DENVER 1-2  
**Sponsored by:**  
 PCL

**WORKSHOP**  
**THE WATER RESEARCH FOUNDATION: PART 1**  
 DENVER 3  
 Join WRF for an interactive workshop setting visions and priorities for the future of water reuse research! During the workshop, we'll review the initial framework for the nationwide roadmap for reuse research, highlighting ongoing research efforts and future opportunities for collaboration. This roadmap supports completion of the EPA WRAP Action 7.2.

**WORKSHOP**  
**WATER REUSE 101 – INTRODUCTION TO WATER RECYCLING FROM THE EXPERTS**  
 DENVER 4

**2:00 pm - 2:30 pm**  
**Denver One Water Plan: Collaborative Management of Integrated Resources**  
 Dave Jula,  
 City and County of Denver

**Presenters:**  
 Bonnie Temple,  
 PCL Construction;  
 April Coady,  
 Eastern Municipal Water District

**Presenters:**  
 Bonnie Temple,  
 PCL Construction;  
 April Coady,  
 Eastern Municipal Water District

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**2:30 pm - 3:00 pm**  
**DPR: Paving the Way to Get Beyond the "Ick" Factor**  
 Birgit Landin,  
 Colorado Springs Utilities;  
 Jennifer Jordan,  
 Colorado Springs Utilities

**Case Studies:**  
 Beth O'Connell,  
 Anne Arundel County, MD;  
 Tania McMillan,  
 Polk County, FL;  
 Abby Haydin,  
 Boise, ID;  
 Stacia Eckenwiler,  
 Columbus, OH;  
 Kellie McDonald,  
 SA Water (Australia)

**Presenters:**  
 Allegra da Silva,  
 Brown & Caldwell;  
 Tim Rynders,  
 CDM Smith;  
 Sara Katz,  
 Katz & Associates;  
 Kevin Linder,  
 Aurora Water

**Part 1: What Is Water Reuse & How/Where to Begin**  
**Presenters:**  
 Allegra da Silva,  
 Brown & Caldwell;  
 Tim Rynders,  
 CDM Smith;  
 Sara Katz,  
 Katz & Associates;  
 Kevin Linder,  
 Aurora Water



CONTINUES AFTER BREAK

CONTINUES AFTER BREAK



WATER MANAGEMENT.  
EVERYTHING IS INTERCONNECTED.

Water reuse. Water treatment. Stormwater management. Collection and conveyance. They are not separate. They interact and affect each other every day. In today's world, integrated water management is not a luxury, it's a necessity that removes barriers and elevates opportunities. At Carollo, we link all aspects of water and ensure they work together to deliver dependable, resilient water supplies for communities like yours. It's all one water.

# MONDAY, MARCH 11

3:00 pm -  
3:30 pm

**NETWORKING BREAK – COLORADO FOYER**

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**MWH**

**Evaluating & Assessing Reuse Treatment Strategies**  
DENVER 1-2  
Moderator:  
Josh Griffis,  
Xylem

**Water Reuse Planning & Collaboration**  
DENVER 5-6  
Moderator:  
Yuliana Porras-Mendoza,  
Garver

3:30 pm -  
4:00 pm

**MBR’s Ability to Disinfect: Microbial Removal for Discharge & Reuse**  
Stephen Katz,  
Veolia Water Technologies  
& Solutions

**San Francisco Bay Area Agencies Forge Partnerships for Reuse**  
Eric Rosenblum,  
Water Resource Consultant;  
Jackie Zipkin,  
East Bay Dischargers  
Authority;  
Shannon Spurlock,  
Pacific Institute;  
Manisha Kothari,  
San Francisco Public  
Utilities Commission;  
Melody LaBella,  
Central Contra Costa  
Sanitary District

**WORKSHOP**

CONTINUED

**THE WATER RESEARCH FOUNDATION: PART 2**

DENVER 3

**Presenters:**

Julie Minton,  
The Water Research Foundation;  
Miriam Hacker,  
The Water Research Foundation;  
Eric Rosenblum,  
Water Resource Consultant;  
Mark Millan,  
Data Instincts;  
Stephan Katz,  
Veolia;  
Zeynep Erdal,  
Black & Veatch;  
Greta Zornes,  
CDM Smith;  
Carrie Del Boccio,  
Woodard and Curran;  
Zachary Dorsey,  
WaterReuse Association

**WORKSHOP**

CONTINUED

**WATER REUSE 101**

DENVER 4

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**Part 2:  
What Are the Kinds  
of Water Reuse?**

**Presenters:**  
Alex Page,  
Kennedy Jenks;  
Brian Good,  
Denver Water;  
Bob Weinschrott,  
Hazen & Sawyer;  
John Wuerth,  
Eastern Municipal  
Water District;  
Shannon Spurlock,  
Pacific Institute

4:00 pm -  
4:30 pm

**Use of Peroxide Disinfectants for Fouling Control of UF Membranes**  
Jana Safarik,  
Orange County  
Water District

4:30 pm -  
5:00 pm

**DNA Origami: Thinking ‘Outside the Fold’ for Membrane Integrity Testing**  
Daniel Gerrity,  
Southern Nevada  
Water Authority



**Role of Reuse in Winter Haven One Water Master Plan**  
Jo Jackson,  
Black & Veatch;  
Keeli Carlton,  
Winter Haven Water

5:00 pm -  
6:30 pm



**WELCOME RECEPTION WITH EXHIBITORS – COLORADO FOYER**

Eat, drink, and meet water reuse practitioners from around the world. During the Welcome Reception, you can visit our diverse and impressive lineup of exhibitors. Sample Revival Pale Ale, sponsored by H2O Innovation.

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# Water Supply Innovation

Whether it's by piloting technologies, developing cost-effective programs, or navigating regulations, we'll help you achieve sustainable water supply innovation.



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Metropolitan Water District of Southern California



Leo J. Vander Lans Facility



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Smith**®

## TUESDAY, MARCH 12

7:30 am - 8:30 am **NETWORKING BREAKFAST – COLORADO BALLROOM**

8:00 am - 10:30 am **OPENING GENERAL SESSION – COLORADO BALLROOM**

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### WELCOME

- Bart Weiss, Chief Officer for Innovation and Resiliency, Hillsborough County Public Utilities; WaterReuse Association President
- Honorable Mike Johnston, Denver Mayor (Invited)

### KEYNOTE PRESENTATION: PETE MCBRIDE

Native Coloradan Pete McBride is a Sony Artisan of Imagery and a National Geographic Adventurer of the Year, who has produced an acclaimed book, three award-winning documentaries, and co-hosted a PBS TV program on the Colorado River. McBride will open the 2024 WaterReuse Symposium with an intimate tour of the historical, geographical, and environmental significance of the Colorado River, bringing into focus the critical need for water recycling in the Colorado River watershed and beyond to ensure resilient, locally controlled water resources that meet the needs of the environment and communities.



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### PANEL: RESTORING OUR NATURAL RESOURCES THROUGH REUSE

Join our panelists to learn about innovative uses of recycled water that are preserving wildlife and plant species, creating beauty for the community, and protecting our water future above ground and below.

#### Moderator

Jon Freedman, Senior Vice President, Global Government Affairs, Veolia Water Technologies & Solutions

#### Panelists

- Bob Angelotti, Executive Director, Upper Occoquan Service Authority
- Jenna Covington, Executive Director, North Texas Municipal Water District
- John Kmiec, Director, Tucson Water
- Terrie Mitchell, Legislative and Regulatory Affairs Manager, Sacramento Area Sewer District

10:30 am - 11:00 am **NETWORKING BREAK – COLORADO FOYER**

Enjoy refreshments, connect with attendees, and meet the exhibitors.

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### POSTER SESSION 1: INNOVATION & RESEARCH – INDEPENDENCE & GOLD COIN, LOWER LEVEL 1

- Bioassay Activity and CEC Removal: DPR vs. Traditional Water Treatment – Elliese Wright, Colorado School of Mines
- Bromate Control in Potable Reuse and Downstream Biofiltration Impacts – Aarthi Mohan, Southern Nevada Water Authority
- Building-Scale Virus Abundance for Water Reclamation Management: Modeling and Assessment – Allison Cook, University of Colorado, Boulder
- Coliphages for Determining Virus Log Reduction Values by Treatment Processes – Charles Gerba, University of Arizona
- Predicting Challenges from Pharmaceutical Contamination in Wastewater Reuse – Vanessa Maybruck, University of Colorado, Boulder
- Sensitive, Speciated Measurements of Volatile Organic Compounds in Water Matrices – Aurelie Marcotte, Entanglement Technologies, Inc

## TUESDAY, MARCH 12

11:00 am - 3:00 pm TOUR: EXPERIMENTS IN WATER (CSU, DENVER WATER, MOBILE DPR)

	<b>Agricultural Reuse Research &amp; Innovation</b> PENROSE 1 Moderator: Michele Braas, Xylem	<b>Climate Resiliency &amp; Adaptation</b> PENROSE 2 Moderator: Jared Gabel, Grundfos	<b>Collaboration &amp; Trust Building to Advance Reuse</b> DENVER 5-6 Moderator: Gilbert Trejo, El Paso Water	<b>Industrial Water Reuse: Food &amp; Beverage</b> DENVER 1-2 Moderator: Andrew Thornton, Hach	<b>Potable Reuse Innovations &amp; Research</b> DENVER 4 Moderator: Ufuk Erdal, Black & Veatch	<b>Water Reuse Planning, Governance, &amp; Management</b> DENVER 3 Moderator: Josh Fortenbaugh, AWWA
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11:00 am - 11:30 am	<b>Addressing Impediments &amp; Incentives for Agricultural Water Reuse</b> Anne Thebo, University of Washington, Climate Impacts Group 	<b>Climate Financing Nature-Based Water Quality Improvements to Offset Carbon-Intensive Reuse</b> Karl Linden, University of Colorado, Boulder	<b>The Science of Communication: The Neuro-psychology Behind Effective Communication</b> Natalie Monro, City of Bellingham	<b>Water Reuse in the Beverage Industry</b> Holly Churman, GHD 	<b>Next Generation of Potable Reuse Trains: Are We Ready?</b> Chris Wilson, Hampton Roads Sanitation District; Zeynep Erdal, Black and Veatch	<b>Navigating the Future: Water Reuse in a Water 2050 Paradigm</b> Joe Jacangelo, Stantec; Heather Collins, Metropolitan Water District of Southern California; Ashley Harper, U.S. EPA; Daniel Nix, City of Wichita Falls
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11:30 am - 12:00 pm	<b>Agricultural Drainage Reuse Maximization Using Biological Concentrate Management</b> Miguel Arias-Paic, USBR; Grace Scarim, USBR	<b>Floating Wetlands: Natural &amp; Sustainable Tool for RO Concentrate Treatment</b> Galen OToole, Intrinsyx Environmental; Nastaran Basiri, Valley Water	<b>The 30-Year Marathon: Lessons from Pure Water San Diego</b> Sara Katz, Katz & Associates; Juan Guerreiro, City of San Diego Public Utilities Department	<b>Danish Food &amp; Beverage Successes Provide Blueprint for Sustainability</b> Michael Skovgaard, Grundfos; Courtney Tripp, Grundfos		
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12:00 pm - 12:45 pm NETWORKING LUNCH – COLORADO BALLROOM

12:45 pm - 1:45 pm WATEREUSE ANNUAL MEETING & AWARDS CEREMONY – COLORADO BALLROOM

**PRESIDENT’S ADDRESS**

Bart Weiss, Chief Officer for Innovation and Resiliency, Hillsborough County Public Utilities; WaterReuse Association President

**STATE OF THE ASSOCIATION**

Patricia L. Sinicropi, Executive Director, WaterReuse Association

**2024 WATEREUSE AWARDS FOR EXCELLENCE CEREMONY**



Beverly Stinson, Ph.D., Executive Vice President, AECOM; WaterReuse Board of Directors

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## TUESDAY, MARCH 12

	<b>Agricultural Reuse Research &amp; Innovation</b> PENROSE 1 Moderator: Anthony Zamorro, CDM Smith	<b>Climate Resiliency &amp; Adaptation: Stormwater Capture &amp; Reuse</b> PENROSE 2 Moderator: Adam Stern, Natural Systems Utilities	<b>Collaboration &amp; Trust Building to Advance Reuse</b> DENVER 5-6 Moderator: Mark Millan, Data Instincts	<b>Industrial Reuse</b> DENVER 1-2 Moderator: Mike Hightower, New Mexico Produced Water Consortium	<b>Potable Reuse Innovations: Pathogen &amp; Chemical Control</b> DENVER 4 Moderator: Greg Wetterau, CDM Smith	<b>Water Reuse Planning, Governance, &amp; Management</b> DENVER 3 Moderator: Fred Gerringe, Hazen and Sawyer
2:00 pm - 2:30 pm	<b>Supporting Agribusiness with Wastewater Reuse in North Dakota</b> Ryan Grubb, AE2S	<b>Urban Stormwater Reuse to Enhance the Public Realm</b> Nathan Campeau, Barr Engineering Co.	<b>Show, Don't Tell: Water Reuse Visitor Centers</b> Jennifer Swart, Water Replenishment District; Lisa Dennis Perez, LOTT Clean Water Alliance; Germano Salazar- Benites, Hampton Roads Sanitation District; Danielle Francis, Water Services Association of Australia	<b>Permitting Fit-for-Purpose Treatment &amp; Reuse of Produced Water</b> Loren Anderson, Marcellus Shale Coalition; Shane Walker, Texas Tech University; Hope Dalton, Colorado Produced Water Consortium; Jason Herman, New Mexico Environment Department	<b>Validating Pathogen Removal in Ozone/BAF Advanced Water Treatment Trains</b> Samantha Hogard, Virginia Tech	<b>One Water Program Management: Elevating Industry Best Practices</b> Julie Labonte, HDR; Karen Pappas, HDR; Johan Torroledo, LADWP 
2:30 pm - 3:00 pm	<b>Risk-Based Treatment Needs for Water Reuse in Protein Processing Facilities</b> Michael Jahne, U.S. EPA Office of Research and Development; Nichole Brinkman, U.S. EPA Office of Research and Development 	<b>Decentralized Stormwater Reuse: A Sustainable Solution in the Bronx</b> Nick Lertola, Opti			<b>Establishing Virus Credits for Uncredited Processes: CFS &amp; Sub-Residual Ozone</b> Delaney Snead, University of Michigan; Tim Dinh, Trussell Technologies, Inc.	<b>Creative Collaborations &amp; Cost Sharing Strategies to Implement Multi-Benefit Projects</b> Stephanie Ishii, Hazen and Sawyer; Tim Devine, Hazen and Sawyer
3:00 pm - 3:30 pm	<b>NETWORKING BREAK – COLORADO FOYER</b> Enjoy refreshments, connect with attendees, and meet the exhibitors.					<b>SPONSORED BY</b> 
	<b>POSTER SESSION 2: TRANSFORMATIONAL APPROACHES – INDEPENDENCE &amp; GOLD COIN, LOWER LEVEL 1</b>					
	<ul style="list-style-type: none"> <li>Detection of Increases of De Facto Reuse Using Machine Learning – Emily Clements, Southern Nevada Water Authority</li> <li>Improving the Usability of Water Tracking Tools in California – Mia Yancich, University of Michigan</li> <li>Ozone/BAC Testing at San Diego’s Central Area Small-Scale Facility – Mitch Bartolo, Trussell Technologies</li> <li>Soft Sensor Monitoring of an Onsite Water Recycling System – Hsiang-Yang Shyu, University of South Florida</li> <li>Tackling PFAS Removal in Carbon-Based Advanced Water Treatment – Erin Bereyso, Virginia Tech; Christopher Waller, Virginia Tech</li> </ul>					

## TUESDAY, MARCH 12

	<b>Elevating Opportunities: Water Reuse Case Studies</b> PENROSE 1 Moderator: Scott Bindner, Trojan Technologies	<b>Climate Resiliency &amp; Adaptation: Groundwater</b> PENROSE 2 Moderator: Jason Kizer, Veolia	<b>Piloting the Right Solution</b> DENVER 5-6 Moderator: Stephen Katz, Veolia	<b>Industrial Reuse Innovative Approaches</b> DENVER 1-2 Moderator: Shayan Yaghoubi, H2O Innovation	<b>Potable Reuse Innovations: Enhanced Process Control &amp; Monitoring</b> DENVER 4 Moderator: Daniel Farley, Black & Veatch	<b>Water Reuse Planning, Governance, &amp; Management</b> DENVER 3 Moderator: Zakir Hirani, Stantec
3:30 pm - 4:00 pm	<b>Imagining a More Sustainable Integrated Water Supply System at USAFA</b> William Landin, HDR; Kirk Weiss, USAFA 10CES/CENM; Tommy Lovelace, Colorado Springs Utilities	<b>Laguna County Pioneers Deep Well ROC Injection for California IPR</b> Andrew Salvesson, Carollo	<b>Connecting through Demonstration: City of Boise's Advanced Water Treatment Pilot</b> Abby Haydin, City of Boise; DeAnn Brown, City of Boise	<b>High Purity Water &amp; Reuse for an Electric Vehicle Manufacturing</b> Chandra Mysore, Jacobs	<b>Machine Learning Soft Sensors for Potable Reuse</b> Kyle Thompson, Carollo Engineers, Inc.; Kathryn Newhart, USMA 	<b>Constructing a Drivers-Based Framework for Assessing Water Reuse Potential</b> Carolyn Hayek, Columbia University; Miriam Hacker, The Water Research Foundation 
4:00 pm - 4:30 pm	<b>Water Flowing Underground: Lessons Learned from Pure Water Monterey</b> Pascual Benito, Montgomery & Associates	<b>Groundwater Modeling to Support Managed Aquifer Recharge</b> Adam Janzen, Barr Engineering Co.	<b>Sydney Water's IPR Demonstration Plant &amp; Regulatory Approval</b> Kaye Power; Sydney Water	<b>Possibilities for Sustainable Industrial Water Reuse around the Great Lakes</b> Rachel Havrelock, Freshwater Lab at the University of Illinois at Chicago; Ahmed Rachid El-Khattabi, Great Cities Institute, University of Illinois at Chicago	<b>Development of a Rapid Virus-Monitoring System in Potable Reuse Projects</b> Keita Soda, Yokogawa Electric Corporation	<b>Alternative Water Supplies in the Midwest: Reuse Roadmapping in Ohio</b> Johnathon Sheets, CDM Smith
4:30 pm - 5:00 pm	<b>Waking Up Southeast Queensland's Western Corridor Recycled Water Scheme</b> Christian Sanders, CDM Smith	<b>Brackish Groundwater Reclamation Program for Future Storage of Recycled Water</b> Kevin Alexander, Hazen and Sawyer	<b>Pure Water Colorado: Three Years Experience with Mobile DPR Demonstration</b> Tzahi Cath, Colorado School of Mines; Steve Myers, Hach	<b>Agricultural Reuse of Industrial Wastewater: A Valuable Resource in California</b> Margaret Wild, Kennedy Jenks Consultants	<b>Online Strontium Analyzer for Potable Reuse Reverse Osmosis Integrity Monitoring</b> Eileen Idica, Trussell Technologies, Inc.	<b>What DPR-Ready Means for Valley Water?</b> Hossein Ashktorab, Santa Clara Valley Water District; Nasi Basiri, Santa Clara Valley Water District
5:00 pm - 6:00 pm						
<b>EMERGING PROFESSIONALS NETWORKING EVENT – EXECUTIVE LOUNGE, 17TH FLOOR</b> Meet other emerging professionals in the water reuse industry and share experiences! Get to know your peers over speed networking, light refreshments, and other hands-on activities.						SPONSORED BY  <b>PLUMMER</b>

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# WEDNESDAY, MARCH 13


**8:00 am - 9:00 am** **BREAKFAST & INTRODUCTION: THE COALITION FOR WATER RECYCLING – COLORADO BALLROOM**

**Moderator**  
Bart Weiss, WateReuse Association President




**Panelists**

- Eliza Roberts, Senior Program Manager, Water, Microsoft
- Will Hewes, Global Lead, Water Sustainability, Amazon Web Services
- Christopher Simoglou, Senior Director of Sustainability Strategy, PepsiCo Beverages North America
- Michael Waitek, Director of Engineering, PepsiCo

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**8:00 am - 12:00 pm** **TOUR: CLOSING THE LOOP (AURORA WATER)**

	<b>Advancing Reuse in Small &amp; Underrepresented Communities</b> PENROSE 2	<b>Emerging Research &amp; Compliance Strategies</b> PENROSE 1 Moderator: Marina Kopytkovskiy, Black & Veatch	<b>Onsite and Decentralized Water Recycling Systems</b> DENVER 5-6 Moderator: Brad Slagle, Grundfos	<b>Removing Policy &amp; Funding Barriers to Reuse</b> DENVER 3 Moderator: Pranjali Kumar, Carollo	<b>Water Reuse Communications, Education, &amp; Outreach</b> DENVER 4 Moderator: Michael Gisclair, H2O Innovation	<b>Water Reuse Operations</b> DENVER 1-2 Moderator: James Scholl, Kiewit
<b>9:00 am - 9:30 am</b>	<b>Identifying &amp; Quantifying Social Equity Impacts from Reuse Projects</b> Shannon Spurlock, Pacific Institute; Vijay Sundaram, AECOM; John Kmiec, Tucson Water; Janet Clements, One Water Econ; Jennifer Walker, National Wildlife Federation	<b>Unified Treatment Strategies for Low Nutrient Limits &amp; Potable Reuse</b> Jeffrey Hlad, Metro Water Recovery; Eric Peterson, Hazen and Sawyer	<b>Innovative Decentralized Reuse for Denver Water "RUFUS:" Challenges &amp; Opportunities</b> Chance Coe and Rachel Himyak, Denver Water	<b>Benefits &amp; Barriers to Reuse in the Mountain West</b> Carl Lundin, CDM Smith; Mark Marlowe, Castle Rock Water; Todd Brewer, Aurora Water; Stephanie Sansom, Parker Water and Sanitation District	<b>Communication Strategies for Advancing Public Acceptance of Potable Reuse Projects</b> Mark Millan, Data Instincts 	<b>Global Lessons Learned: Utility Strategies for Developing &amp; Commercializing Water Reuse</b> Isabel Kezman, Bluefield Research
<b>9:30 am - 10:00 am</b>		<b>Real-Time Detection of VOCs in RO-Based Potable Reuse</b> Eric Dickenson, Southern Nevada Water Authority 	<b>Onsite Non-Potable Water Systems: Decentralized Wastewater Treatment in Washington</b> Jocelyn Jones, Washington State Dept of Health		<b>Beyond Beer: Using Pure Water Kombucha to Engage Larger Audiences</b> Rebecca Rubin, Soquel Creek Water District	<b>Every Last Drop: How Treatment Plant Improvements Maximize Reuse Efficiency</b> Christopher Ott, CDM Smith
<b>10:00 am - 10:30 am</b>	<b>Overflowing Opportunities: Water-Abundant Regions Can Reuse Too</b> Evelyn Choudhary, WSP; Rebecca Borker, WSP	<b>Using GAC Post RO to Target Low Molecular Weight VOCs</b> George William Kajjumba, Southern Nevada Water District 	<b>Sewer Mining for Decentralized Water Reuse</b> Jeff Danner, Innovatreat; Amelia Luna, Sherwood Design Engineers	<b>How WIFIA Financing Helps Communities Implement Water Reuse Projects</b> Karen Fligger and Ashley Osler, U.S. Environmental Protection Agency	<b>Reviving the Global Map of Reuse for Drinking around the World</b> Danielle Francis, Water Services Association of Australia	<b>Recycled Water Program Perspective on Contract Management</b> Pablo Martinez, San Antonio Water System



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Hach® analytical solutions provide water professionals across the globe with visibility into each treatment step in the water reuse journey.

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## Where to find us at WaterReuse 2024:

- **Booth #6**
- **Tue. Mar. 12 | 4:30-5:00pm**  
Co-presenter, PureWater Colorado: Three Years Experience with Mobile DPR Demonstration
- **Wed. Mar. 13 | 4:30-5:00pm**  
Industry Panel Discussion: Establishing the Future of Instrumentation, AI, and Monitoring in Reuse – Conversation with Industry Experts



Session aligns with National Water Reuse Action Plan (WRAP) efforts.



Session aligns with The Water Research Foundation (WRF) efforts.

## WEDNESDAY, MARCH 13

10:30 am -  
11:00 am

### NETWORKING BREAK – COLORADO FOYER

Enjoy refreshments, connect with attendees, and meet the exhibitors.

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### POSTER SESSION 3: REMOVING BARRIERS – INDEPENDENCE & GOLD COIN, LOWER LEVEL 1

- Desalination of Produced Water by Low Salt Rejection Reverse Osmosis – Brett Van Houghton, Colorado School of Mines
- Elevating Industrial Reuse: A California Example of Water Resiliency – Melene Agakaian, Hazen and Sawyer; Nathan Boyle, Hazen and Sawyer; Kevin Cullen, West Basin Municipal Water District
- Mitigating Membrane Fouling in Reuse: Novel Low Wavelength UV Pre-Treatment – Karl Linden, University of Colorado Boulder; Emma Payne, University of Colorado Boulder
- Recycling Process Water at Iconic Napa Winery: Pilot Study – Carl DiManno, Engineered Filtration Solutions
- Novel Membrane Scaling Control System for Closed-Circuit Desalination Processes – John Bush, Colorado School of Mines; Alexander Schwiebert, Colorado School of Mines
- Building Resilient Communities Through Integrated Water Management - Laura Rocha, Moulton Niguel Water District

	<b>Advancing Reuse in Small &amp; Underrepresented Communities</b> PENROSE 2 Moderator: Brock Hodgson, AECOM	<b>Innovation &amp; Emerging Research</b> PENROSE 1 Moderator: Miriam Hacker, The Water Research Foundation	<b>Onsite &amp; Decentralized Water Recycling Systems</b> DENVER 5-6 Moderator: Bob Salvatelli, NextEra Distributed Water	<b>Water Reuse Policy</b> DENVER 3 Moderator: Jon Freedman, Veolia	<b>Water Reuse Communications, Education, &amp; Outreach</b> DENVER 4 Moderator: Alicia DuPree, AECOM	<b>Water Reuse Operations</b> DENVER 1-2 Moderator: Vijay Sundaram, AECOM
11:00 am - 11:30 am	<b>Smaller Utilities Face Big Challenges with Direct Potable Reuse</b> Kevin Daniels, Stantec	<b>Unlocking the Nationwide Potential for Water Reuse: Fresh Research Insights</b> Eric Dickenson, Southern Nevada Water Authority; Karl Linden, University of Colorado Boulder; Sherri Cook, University of Colorado Boulder; Tzahi Cath, Colorado School of Mines	<b>Successful Implementation of Onsite Systems Through Public-Private Partnerships</b> Zach Gallagher, Natural Systems Utilities; Michael Dae, JEA; Chris Lindsay, IAPMO; Bernd Meyer, Reynolds American; Greta Zornes, CDM Smith	<b>Panel: Federal &amp; State Policy Developments</b> Greg Fogel, WaterReuse Association; Rosario Cortés, WaterReuse California; Noelle George, WaterReuse Texas; Tricia Kilgore, WaterReuse South Carolina; Beaufort-Jasper Water & Sewer Authority; John Rehring, WaterReuse Colorado, Carollo	<b>Engaging the Medical &amp; Public Health Community in Water Reuse</b> Dr. Karla Mendez, UTHealth Houston School of Public Health; Christina Montoya, El Paso Water Utilities; Gilbert Trejo, El Paso Water Utilities; Dr. Hector Ocaranza, City of El Paso Department of Public Health; Dr. Brett Perkinson, UTHealth Houston School of Public Health	<b>Overcoming Resource Challenges in Advanced Water Purification Projects</b> Lauren Zuravnsky, Hampton Roads Sanitation District; Mark Niemiec, Padre Dam Water District; Lydia Teel, Truckee Meadows Water Authority; Brian Daly, AECOM
11:30 am - 12:00 pm	<b>Aqua Pura: Adapting to Climate Change in Northern New Mexico</b> Patricia Bolliger, Stantec	 				

# WEDNESDAY, MARCH 13

12:00 pm -  
1:45 pm

## NETWORKING LUNCH & EXECUTIVE PANEL: WATER RECYCLING IN THE COLORADO RIVER BASIN – COLORADO BALLROOM

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Join us at noon for a networking lunch, followed by a special panel beginning at 12:45.

**Moderator**

Haley Falconer, City of Boise

**Panelists**

- Adel Hagekhalil, General Manager and Chief Executive Officer, Metropolitan Water District of Southern California
- Troy Hayes, Water Services Director, City of Phoenix
- Alan Salazar, CEO/Manager, Denver Water



2:00 pm -  
5:00 pm

## TOUR: REUSE FOR THE FUTURE (CASTLE ROCK WATER)

	<p><b>Industry Innovations: Part 1</b> PENROSE 2 Moderator: Jim Lee, Eastern Municipal Water District</p>	<p><b>Innovation &amp; Emerging Research</b> PENROSE 1 Moderator: Dawn Morrison, USACE ERDC CERL</p>	<p><b>Onsite &amp; Decentralized Water Recycling Systems</b> DENVER 5-6 Moderator: Rick Petrosino, Natural Systems Utilities</p>	<p><b>Water Reuse Regulations</b> DENVER 3 Moderator: Ashley Voskuhl, Association of State Drinking Water Administrators</p>	<p><b>Water Reuse Operations</b> DENVER 1-2 Moderator: Troy Walker, Hazen and Sawyer</p>	<p> GLOBAL DIALOGUE ON WATER REUSE DENVER 4 Moderator: Zohreh Movahed, Watek Engineering, WaterReuse International Committee</p>
2:00 pm - 2:30 pm	<p><b>Carbon-Based Advanced Treatment: Where We Are &amp; Where We Are Going</b> Gaya Ram Mohan, Hazen and Sawyer; Eric Petersen, Hazen and Sawyer</p>	<p><b>Water Reuse Consortium: Research Findings</b> Amy Childress, University of Southern California; Andrea Achilli, University of Arizona; Eric Marchand, University of Nevada-Reno; Kathryn Gunderson, USACE ERDC-CERL</p>	<p><b>The River Mile: Taking Distributed Reuse to the Mile High</b> Zach Gallagher, Natural Systems Utilities; Greg Murphy, Calibre Engineering</p>	<p><b>Water Reuse Regulator Summit Briefing &amp; Panel</b> <b>Panelists:</b> Laura Carusona, AZ Department of Environmental Quality; Brandi Honeycutt, Colorado Department of Public Health; Johnathan Leiman, Maryland Department of Environment; Cindy Wheeler, Tennessee Department of Environment</p>	<p><b>Operations: Rising to the Challenges of Potable Reuse</b> Heather Collins, Metropolitan Water District of Southern California; Mehul Patel, Orange County Water District; Eric Owens, Water Replenishment District of Southern California; David Walby, City of Scottsdale</p>	<p><b>International Expert Panel</b> <b>Opening Remarks:</b> Shannon McCarthy, International Desalination &amp; Reuse Association <b>Panelists:</b> Hossein Ashktorab, Valley Water (USA); Danielle Francis, Water Services Association of Australia; Bernard Koh, PUB (Singapore); Booky Oren, Global Water Technologies (Israel); Yvan Poussade, Veolia (Europe); Amal Talbi, The World Bank</p>
2:30 pm - 3:00 pm	<p><b>Cherokee Indirect Potable Reuse Project: High Recovery Reverse Osmosis</b> Roi Zaken, IDE Water Technologies</p>	<p><b>Water Reuse Consortium: Research Findings</b> Amy Childress, University of Southern California; Andrea Achilli, University of Arizona; Eric Marchand, University of Nevada-Reno; Kathryn Gunderson, USACE ERDC-CERL</p>	<p><b>The River Mile: Taking Distributed Reuse to the Mile High</b> Zach Gallagher, Natural Systems Utilities; Greg Murphy, Calibre Engineering</p>	<p><b>Water Reuse Regulator Summit Briefing &amp; Panel</b> <b>Panelists:</b> Laura Carusona, AZ Department of Environmental Quality; Brandi Honeycutt, Colorado Department of Public Health; Johnathan Leiman, Maryland Department of Environment; Cindy Wheeler, Tennessee Department of Environment</p>	<p><b>Operations: Rising to the Challenges of Potable Reuse</b> Heather Collins, Metropolitan Water District of Southern California; Mehul Patel, Orange County Water District; Eric Owens, Water Replenishment District of Southern California; David Walby, City of Scottsdale</p>	<p><b>International Expert Panel</b> <b>Opening Remarks:</b> Shannon McCarthy, International Desalination &amp; Reuse Association <b>Panelists:</b> Hossein Ashktorab, Valley Water (USA); Danielle Francis, Water Services Association of Australia; Bernard Koh, PUB (Singapore); Booky Oren, Global Water Technologies (Israel); Yvan Poussade, Veolia (Europe); Amal Talbi, The World Bank</p>



# WEDNESDAY, MARCH 13

3:00 pm -  
3:30 pm

## NETWORKING BREAK – COLORADO FOYER




Enjoy refreshments, connect with attendees, and meet the exhibitors.

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## POSTER SESSION 4: ELEVATING OPPORTUNITIES – INDEPENDENCE & GOLD COIN, LOWER LEVEL 1

- Advancing Water Reuse at Army Installations – Lilian Burritt, USACE ERDC CERL; Kylie Burkett, USACE ERDC CERL
- Developing Antelope Valley’s Inland Potable Reuse Program – Kyleen Marcella, Stantec; Scott Rogers, Palmdale Water District
- Drivers of Beneficial Reuse in Franklin Tennessee – Scott Alpert, Hazen and Sawyer; Michelle Hatcher, City of Franklin, TN
- Indirect Potable Reuse with Nanotechnology in León, Mexico – Rafael Zarate, Sistema de Agua Potable y Alcantarillado de Leon
- Pilot-Scale Removal of Emerging Contaminants from Graywater: Overcoming the Barriers – Chris Griggs, Environmental Engineering Branch, U.S. Army ERDC

	Industry Innovations: Part 2 PENROSE 2 Moderator: Ryan Popko, JEA	PFAS Removal in Reuse Systems PENROSE 1 Moderator: Carlos Williams, Hach	Public Health Considerations for Water Reuse DENVER 5-6 Moderator: Erin Mackey, Brown and Caldwell	Removing Regulatory & Permitting Barriers to Reuse DENVER 3 Moderator: Amos Branch, Carollo	Water Reuse Workforce Development DENVER 1-2 Moderator: Nikita Lingenfelter, Sundt	GLOBAL DIALOGUE ON WATER REUSE DENVER 4
3:30 pm - 4:00 pm	<b>Reduce Before We Reuse: Innovative Solutions to Advance Water &amp; Energy Savings</b> Tyler Johnson, Michael Skovgaard and Courtney Tripp, Grundfos	<b>Potable Reuse Leads the PFAS Game: Lessons from WRF 5082</b> Eva Steidle-Darling, Carollo Engineers, Inc. 	<b>Cost-Effective Approaches for Control of Multiple CECs in Watersheds</b> Gayathri Ram Mohan and Conner Murray, Hazen and Sawyer 	<b>A Tale of Two States: The Why’s Behind DPR Frameworks</b> Catherine Vanyo, Hazen and Sawyer; Chelsea Cotton, Colorado Department of Public Health and Environment; Karthik Kumarasamy, Arizona Department of Environmental Quality; Kevin Linder, Aurora Water; David Walby, Scottsdale Water	<b>Water Reuse Workforce: A Discussion on Recruitment, Training, &amp; Retention</b> Sarah Espinosa, McCarthy Building Co.; Farah Alkerwy, McCarthy Building Co.	<b>Roundtable Discussion</b> Join roundtable discussion groups to contribute your perspectives on how to accelerate water reuse globally.
4:00 pm - 4:30 pm	<b>The Role of Decentralized Solutions in Driving Water Reuse, &amp; Supporting Technologies</b> Ari Veltman, WFI Group	<b>PFAS Removal in Advanced Water Treatment for Indirect Potable Reuse</b> Lin Li, University of Nevada, Reno	<b>Public Health Implications &amp; Water Reuse: The Risk of Antibiotic Resistance</b> Lee Kimbell, Black & Veatch			
	<b>Establishing the Future of Instrumentation, AI, &amp; Monitoring in Reuse</b> Russ Young, Hach; Ufuk Erdal, Black & Veatch; Jana Safarik, Orange County Water District; Dr. Tzahi Cath, Colorado School of Mines	<b>An Efficient PFAS Removal Approach for Carbon-Based Advanced Treatment</b> Tyler Nading, Jacobs; Ann Malinaro, Aurora Water	<b>Risk-based Human Exposure Assessment of Chemicals in the Circular Economy</b> Veronika Zhiteneva, Kompetenzzentrum Wasser Berlin	<b>Driving Reuse Forward: NPDES Permitting Strategies to Accelerate Innovation</b> Justin Mattingly, U.S. EPA 	<b>Water Workforce for Resilient Communities Pilot Program: Lessons Learned</b> Kristan VandenHeuvel, The Water Tower - Gwinnett County Department of Water Resources	



# Hazen

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WEDNESDAY, MARCH 13

6:00 pm -  
9:00 pm



## PARTY AT THE DENVER MUSEUM OF NATURE & SCIENCE – 2001 COLORADO BLVD, DENVER, CO

Enjoy music, museum exhibits, drinks and heavy hors d'oeuvres. A behind-the-scenes tour of the museums water recycling system will also be available to small groups. Buses will circulate between the Hilton City Center and the museum throughout the event. The first buses will depart the hotel at 5:30 pm. Please wear your badge.

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## THURSDAY, MARCH 14

8:00 am -  
9:00 am

### BREAKFAST PLENARY SESSION – COLORADO BALLROOM

#### HOT TOPICS IN WATER REUSE RESEARCH

Peter Grevatt, CEO of The Water Research Foundation

#### LEVERAGING COLLABORATION TO ADVANCE WATER REUSE: UPDATE ON THE FEDERAL INTERAGENCY WORKING GROUP & NATIONAL WATER REUSE ACTION PLAN (WRAP)

- Tanya Mottley, Deputy Office Director, Office of Science and Technology, U.S. EPA Office of Water
- Sharon Nappier, National Program Leader for Water Reuse, Office of Science and Technology, U.S. EPA Office of Water

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9:00 am -  
10:15 am



### GLOBAL DIALOGUE ON WATER REUSE: INTERNATIONAL COLLABORATION & A PATH FORWARD – COLORADO BALLROOM

The Global Dialogue on Water Reuse concludes with a report out in plenary session during the closing day of the Symposium.

#### INTRODUCTORY REMARKS

Shannon McCarthy, Secretary General, International Desalination & Reuse Association

#### HIGHLIGHTS FROM DAY ONE OF THE GLOBAL DIALOGUE ON WATER REUSE

Hossein Ashktorab and Zoreh Movahed, Co-Chairs, WaterReuse International Committee

#### PANEL: OPPORTUNITIES FOR INTERNATIONAL COLLABORATION ON WATER REUSE – A PATH FORWARD

##### Moderator

Hossein Ashktorab, Manager, Valley Water and Co-Chair, WaterReuse International Committee

##### Panelists

- Danielle Francis, Manager, Policy and Strategy, Water Services Association of Australia
- Bernard Koh, Assistant Chief Executive, PUB, Singapore's National Water Agency
- Zohreh Movahed, Watek Engineering & Co-Chair, WaterReuse International Committee
- Booky Oren, Global Water Technologies (Israel)
- Yvan Poussade, Product Owner, Water Reuse, Veolia (Europe)
- Amal Talbi, Global Lead for Water in Agriculture, The World Bank





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## THURSDAY, MARCH 14

10:15 am -  
11:45 am

### TECHNOLOGY SHOWCASE 2024 – COLORADO BALLROOM

Discover new and disruptive technologies that could significantly transform water recycling, and engage directly with the researchers.

#### Moderator

Peter Fiske, Executive Director, National Alliance for Water Innovation

#### FEATURED TECHNOLOGIES

- Concentrate Treatment and Chemical Production Using Innovative Electrodialysis Processes for Near Zero-Waste Discharge – Pei Xu, New Mexico State University
- Data-Driven Fault Detection and Process Control for Potable Reuse with Reverse Osmosis – Andy Salveson, Carollo
- Field Pilot Testing of Electrically Conductive Reverse Osmosis Membranes for High Mineral Content Brackish Groundwater Desalination – Arian Edalat, Pacifica Water Solutions, Inc.
- Mobile Demonstration DPR: Comparison of RO and Non-RO DPR for Aerobic and Anaerobic Effluents – Tzahi Cath, Colorado School of Mines
- Mobile Test Bed for Marginal Water Filtration – Michael Watts, Garver USA
- Process Twins for Decision-Support and Dynamic Energy/Cost Prediction in Water Reuse Processes – Diego Rosso, UC Irvine
- Reciprocating Piston Batch Reverse Osmosis: Pushing the Limits of Efficiency and Fouling Resistance – David Warsinger, Purdue University
- Salt-Free Electrodialysis Metathesis (EDM) For High Recovery Concentrate Management – Shane Walker, University of Texas, El Paso
- Switchable Solvent ZLD Process for Solving the Inland Desalination Brine Problem – Clark Easter, Global Water Innovations, Inc.
- UHP-CCRO with Virtual Curtain to Achieve Minimal Liquid Discharge – Jim Lozier, Jacobs Engineering
- Wastewater Pretreatment for Potable Reuse – Judy Riffle, NALA Membranes, Inc.
- 222 nm KrCl\* Driven Advanced Oxidation for Reverse Osmosis Pretreatment: Fouling Control and Chemical/Pathogen Abatement – Karl Linden, University of Colorado at Boulder

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11:45 am

#### CLOSING REMARKS

Bart Weiss, Chief Officer for Innovation and Resiliency, Hillsborough County Public Utilities; WaterReuse Association President

See you next year: 2025 WaterReuse Symposium, March 16–19, Tampa, Florida



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The WaterReuse Association partners with the Water Environment Federation (WEF), the National Association of Clean Water Agencies (NACWA), and the Water Research Foundation (WRF) in leading this program, with support from the U.S. Environmental Protection Agency (EPA) and Department of Energy (DOE).

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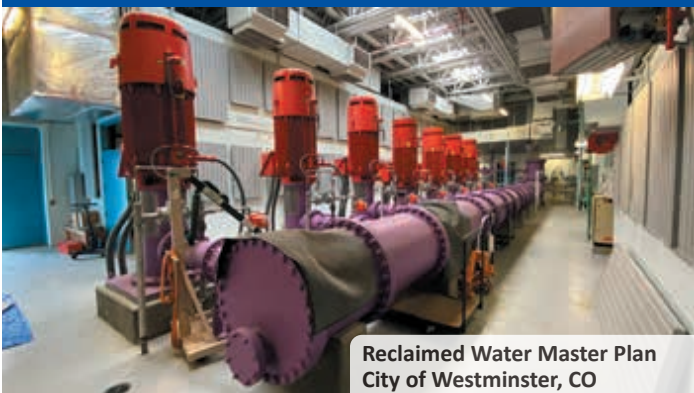
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